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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:19:51 ON 24 OCT 2006

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 08:20:10 ON 24 OCT 2006

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STRUCTURE FILE UPDATES: 23 OCT 2006 HIGHEST RN 911100-17-9

DICTIONARY FILE UPDATES: 23 OCT 2006 HIGHEST RN 911100-17-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

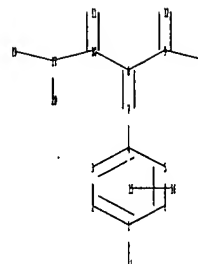
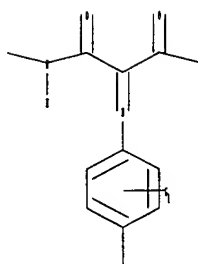
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\microsphere.str

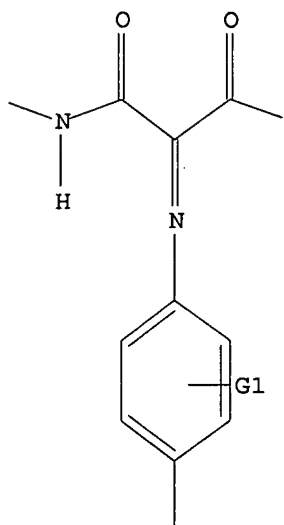


chain nodes :
 7 8 9 10 11 12 15 16 17 18 19 20 21
 ring nodes :
 1 2 3 4 5 6
 chain bonds :
 1-21 4-7 7-8 8-9 8-10 9-12 9-18 10-11 10-17 15-16 17-19 17-20
 ring bonds :
 1-2 1-6 2-3 3-4 4-5 5-6
 exact/norm bonds :
 4-7 7-8 9-12 10-11 10-17 15-16 17-19
 exact bonds :
 1-21 8-9 8-10 9-18 17-20
 normalized bonds :
 1-2 1-6 2-3 3-4 4-5 5-6

G1:OH,MeO,EtO,n-PrO,i-PrO,n-BuO,i-BuO,s-BuO,t-BuO,NH2,Cb,Cy,Hy,Ak

Match level :
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
 11:CLASS 12:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
 21:CLASS

=> D L1
 L1 HAS NO ANSWERS
 L1 STR



G1 OH, MeO, EtO, n-PrO, i-PrO, n-BuO, i-BuO, s-BuO, t-BuO, NH2, Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s L1 full
 FULL SEARCH INITIATED 08:20:43 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 326 TO ITERATE

100.0% PROCESSED 326 ITERATIONS 0 ANSWERS
 SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

=> file caplus
 COST IN U.S. DOLLARS
 FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
166.94	167.15

FILE 'CAPLUS' ENTERED AT 08:20:49 ON 24 OCT 2006
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FILE COVERS 1907 - 24 Oct 2006 VOL 145 ISS 18
 FILE LAST UPDATED: 23 Oct 2006 (20061023/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s L2

L3 0 L2

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

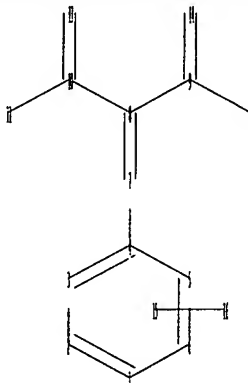
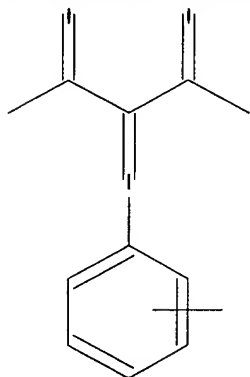
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.46	167.61

STN INTERNATIONAL LOGOFF AT 08:21:02 ON 24 OCT 2006

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\microsphere32.str



chain nodes :

7 8 9 10 11 12 13 14 15 16

ring nodes :

1 2 3 4 5 6

chain bonds :

4-7 7-8 8-9 8-10 9-12 9-14 10-11 10-13 15-16

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

4-7 7-8 9-14 10-13

exact bonds :

8-9 8-10 9-12 10-11 15-16

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS

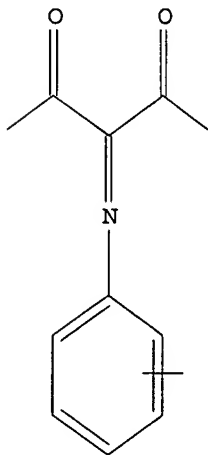
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS

L1 STRUCTURE UPLOADED

=> d L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L1 full

FULL SEARCH INITIATED 08:50:38 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2106 TO ITERATE

100.0% PROCESSED 2106 ITERATIONS
SEARCH TIME: 00.00.01

7 ANSWERS

L2 7 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST

166.94

167.15

FILE 'CAPLUS' ENTERED AT 08:50:45 ON 24 OCT 2006

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FILE COVERS 1907 - 24 Oct 2006 VOL 145 ISS 18

FILE LAST UPDATED: 23 Oct 2006 (20061023/ED)

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=> s L2 all

MISSING OPERATOR L2 ALL

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s L2

L3 5 L2

=> d L3 1-5 all

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:750901 CAPLUS <<LOGINID::20061024>>

DN 139:278100

ED Entered STN: 25 Sep 2003

TI Black pigment microparticle dispersions for ink-jet inks and their use in ink-jet printing

IN Takahashi, Mari; Ofuku, Koji; Miura, Norio

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 78 pp.

CODEN: JKXXAF

DT Patent

LA Japanese
 IC ICM C09B067-20
 ICS B41J002-01; B41M005-00; C09B067-46; C09D011-00
 CC 42-12 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003268255	A2	20030925	JP 2002-76068	20020319
PRAI	JP 2002-76068		20020319		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003268255	ICM	C09B067-20
	ICS	B41J002-01; B41M005-00; C09B067-46; C09D011-00
	IPCI	C09B0067-20 [ICM,7]; B41J0002-01 [ICS,7]; B41M0005-00 [ICS,7]; C09B0067-46 [ICS,7]; C09B0067-00 [ICS,7,C*]; C09D0011-00 [ICS,7]
	IPCR	B41J0002-01 [I,C*]; B41J0002-01 [I,A]; B41M0005-00 [I,C*]; B41M0005-00 [I,A]; C09B0067-00 [I,C*]; C09B0067-20 [I,A]; C09B0067-46 [I,A]; C09D0011-00 [I,C*]; C09D0011-00 [I,A]

OS MARPAT 139:278100

AB The dispersions giving prints with high black color d. and resistance to light, contain compds. Q=N-X (Q = color coupler residue; X = 5- or 6-membered aromatic rings or alicyclic rings) as colorants, polymer binders and hydrophobic organic solvents having b.p. of $\geq 150^\circ$ and are dispersed in an aqueous medium where the colorants and polymers form core/shell microparticles for improving lightfastness and storage stability.

ST jet printing ink lightfastness storage stability pigment black colorant

IT Polyvinyl acetals

RL: TEM (Technical or engineered material use); USES (Uses)
 (acetoacetals, S-Lec KS 10; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT Polyamides, uses

Polycarbonates, uses

Polyureas

RL: TEM (Technical or engineered material use); USES (Uses)
 (binder; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT Polyvinyl butyrals

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (binders from S-Lec BL 10, BL-S, BX 1, KS 3, BX 10, BX-L, BL 1, Denka Butyral 2000L, 6000EP; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT Solvents

(high-boiling; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT Inks

(jet-printing; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT Polyurethanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)
 (polyoxyalkylene-, binder; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT Pigments, nonbiological

(selection of black pigments for microparticle dispersions useful for

ink-jet inks with good storage stability and lightfastness)

IT 9011-14-7, PMMA
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (binder; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

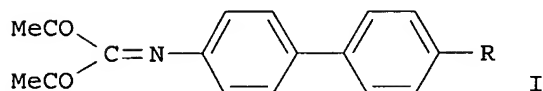
IT 24936-68-3, Iupilon S 3000, uses 25119-83-9, Acrylic acid-butyl acrylate copolymer 32131-17-2, Nylon 66, uses 53078-89-0, Hexamethylenediamine-MDI-TDI copolymer 59041-14-4, Methacrylic acid-methyl methacrylate-2,2,2-trifluoroethyl methacrylate copolymer 341536-55-8, Acrylic acid-butyl acrylate-1H,1H,2H,2H-perfluorodecyl acrylate copolymer 558484-70-1, 1,4-Butanediol-ethylene glycol-HMDI-polyethylene glycol-TDI copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (binder; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT 78-43-3 78-51-3, Tri(2-butoxyethyl) phosphate 84-61-7, Dicyclohexyl phthalate 84-74-2, Dibutyl phthalate 103-23-1 115-86-6, Triphenyl phosphate 115-96-8, Tri(2-chloroethyl) phosphate 122-62-3 1241-94-7, Diphenyl(2-ethylhexyl) phosphate 1330-78-5, Tritolyl phosphate 2528-39-4, Trihexyl phosphate 5444-75-7, 2-Ethylhexyl benzoate 28510-23-8 37832-65-8 56975-20-3 111671-75-1 129877-64-1 604783-41-7
 RL: NUU (Other use, unclassified); USES (Uses)
 (high-boiling solvents; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

IT 85-83-6, C.I. Solvent Red 24 1229-55-6 1320-06-5, C.I. Solvent Red 27 3785-90-8 4197-25-5 4314-14-1, C.I. Solvent Yellow 16 6406-53-7, C.I. Solvent Red 32 8003-22-3, C.I. Solvent Yellow 33 12225-32-0, Reactive Black 17 12237-24-0, C.I. Solvent Blue 70 19649-65-1 32881-02-0 38924-04-8 55290-62-5 69458-41-9, C.I. Solvent Black 43 71775-87-6, C.I. Solvent Blue 1 74566-13-5, C.I. Solvent Black 22 87606-56-2 128171-69-7 148345-88-4 161407-47-2 162208-01-7 169225-47-2 179157-18-7, C.I. Solvent Blue 40 189100-94-5 192075-25-5 192075-28-8 193684-91-2 193684-95-6 201026-53-1 205192-67-2 246232-93-9 255044-93-0 415726-33-9 501420-02-6 501420-03-7 501420-25-3 545387-52-8 545387-53-9 545387-54-0 604782-69-6 604782-70-9 604782-71-0 604782-72-1 604782-73-2 604782-74-3 604782-75-4 604782-76-5 604782-77-6 604782-78-7 604782-79-8 604782-80-1 604782-81-2 604782-82-3 604782-83-4 604782-84-5 604782-85-6 604782-87-8 604782-88-9 604782-89-0 604782-90-3 604782-91-4 604782-92-5 604782-93-6 604782-96-9 604782-97-0 604782-98-1 604782-99-2 604783-00-8 604783-01-9 604783-02-0 604783-03-1 604783-04-2 604783-05-3 604783-06-4 604783-07-5 604783-08-6 604783-09-7 604783-10-0 604783-11-1 604783-12-2 604783-13-3 604783-14-4 604783-16-6 604783-17-7 604783-19-9 604783-20-2 604783-21-3 604783-22-4 604783-23-5 604783-24-6 604783-26-8 604783-27-9 604783-28-0 604783-29-1 604783-30-4 604783-31-5 604783-32-6 604783-33-7 604783-34-8 604783-35-9 604783-36-0 604783-37-1 604783-38-2 604783-39-3 605644-48-2 605644-49-3 605644-50-6
 RL: TEM (Technical or engineered material use); USES (Uses)
 (pigments; selection of black pigments for microparticle dispersions useful for ink-jet inks with good storage stability and lightfastness)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:190157 CAPLUS <<LOGINID::20061024>>
 DN 130:296456
 ED Entered STN: 24 Mar 1999
 TI Crystal structure of C19H22N2O3 and synthesis of two potential Schiff-base ligands
 AU Jian, Li; Wen-Xing, Zhang; Chang-Qin, Ma; De-Hua, Jiang; Tian-Lin, Yang
 CS College of Chemistry, Shandong University, Jinan, 250100, Peop. Rep. China

SO Jiegou Huaxue (1999), 18(2), 89-93
 CODEN: JHUADF; ISSN: 0254-5861
 PB Jiegou Huaxue Bianji Weiyuanhui
 DT Journal
 LA English
 CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 GI



AB Two new Schiff bases [I; R = NH₂, N:C(COMe)₂] were synthesized and characterized by elemental analyses, IR, UV and ¹H NMR spectra. The crystal and mol. structures of I (R = NH₂) were determined by x-ray diffraction.

ST biphenyldiamine diacetylmethylene prepn x ray
 IT 6161-50-8, 3,3'-Dimethoxybiphenyl
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation with acetylacetone)

IT 123-54-6, Acetylacetone, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation with dianisidine)

IT 223418-51-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

IT 223418-50-6P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, x-ray anal., and reaction with acetylacetone)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Casellato, U; Coord Chem Rev 1979, V25, P199
- (2) Casellato, U; Coord Chem Rev 1997, V23, P31
- (3) Ci, Y; Coordination Compounds in Analytical Chemistry (China) 1986, P230
- (4) Nakamoto, K; Infrared and Raman Spectra of Inorganic and Coordination Compounds. 3ed 1986, P256
- (5) Nelson, S; Pure Appl Chem 1980, V52, P2461 CAPLUS
- (6) Nishida, Y; Chem Lett 1983, V144, P1815
- (7) Sorrel, T; Tetrahedron 1989, V45, P3
- (8) Tang, L; Chem Res and Appl 1995, V7, P8 CAPLUS
- (9) Zacharias, P; Polyhedron 1985, V4, P1013 CAPLUS

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1992:49016 CAPLUS <<LOGINID::20061024>>
 DN 116:49016
 ED Entered STN: 08 Feb 1992
 TI Dyes for sublimation-transfer printing and dye sheet
 IN Karasawa, Akio; Koshida, Hitoshi; Aida, Isamu; Takuma, Hirotsuke
 PA Mitsui Toatsu Chemicals, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 IC ICM B41M005-38
 ICS C09B055-00

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

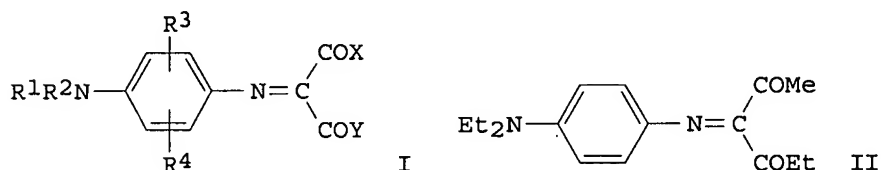
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 03197090 A2 19910828 JP 1989-334837 19891226
 PRAI JP 1989-334837 19891226

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 03197090	ICM	B41M005-38
	ICS	C09B055-00
	IPCI	B41M0005-38 [ICM,5]; C09B0055-00 [ICS,5]

GI



AB The title dyes I [R1-2 = alkyl, alkenyl, aryl; R1-2 may be mutually bonded; R3-4 = H, halo, OH, cyano, alkyl, alkoxy; X = (cyclo)alkyl, aryl; Y = (cyclo)alkyl, aryl, OZ; Z = (cyclo)alkyl, alkenyl, aryl; X and Y may be mutually bonded]. I are yellow dyes and are suitable for sublimation-transfer printing of full-color images. Thus, a dispersion containing 3 parts of a dye II synthesized from N,N-diethylphenylenediamine and Et acetoacetate by oxidation and 4.5 parts butyral resin was applied on PET film to form a 1 g/m2 layer. This film was used for sublimation-transfer printing with a receptor sheet coated with polyester, EVA and silicones and gave image with d. 2.7, which was highly colorfast and resistant to abrasion.

ST sublimation transfer printing yellow dye

IT Dyes

(sublimable, yellow, for sublimation-transfer printing)

IT Printing, nonimpact

(sublimation-transfer, yellow sublimable dyes for)

IT 93-05-0

RL: USES (Uses)

(oxidative condensation of, with Et acetoacetate)

IT 141-97-9, Ethyl acetoacetate

RL: USES (Uses)

(oxidative condensation of, with diethylphenylenediamine)

IT 69947-30-4 107266-41-1 124009-34-3 138311-22-5

138311-23-6 138311-24-7 138311-25-8 138311-26-9 138311-27-0

138311-28-1 138311-29-2 138311-30-5 138311-31-6 138311-32-7

138311-33-8 138323-56-5 138323-57-6

RL: USES (Uses)

(sublimable dye, yellow, for sublimation-transfer printing)

L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1990:6938 CAPLUS <<LOGINID::20061024>>

DN 112:6938

ED Entered STN: 06 Jan 1990

TI Different substituent effects on the absorption maxima of azomethines and hydrazones

AU Mustroph, Heinz; Henning, Lothar; Wilde, Horst

CS Dir. Forsch. Entwickl., VEB Filmfabr. Wolfen, Wolfen, DDR-4440, Ger. Dem. Rep.

SO Zeitschrift fuer Chemie (1989), 29(2), 66-7

CODEN: ZECEAL; ISSN: 0044-2402

DT Journal

LA German

CC 22-9 (Physical Organic Chemistry)
OS CASREACT 112:6938
AB Peaks positions (λ_{\max}) of 4-Et2NC6H4(NH)nN:CRR1 (I; n = 0) increased in the following order of R, R1: COMe, COMe; COMe, CPh; CPh, CPh; CN, CPh; CN, CN. The same order of λ_{\max} was found for I (n = 1) except that the peak for I (n = 1, R = R1 = CN) appeared at the lowest wavelength. The results were discussed in terms of intramol. H bonding.
ST spectra azomethine hydrazone substituent effect; hydrogen bond intramol hydrazone spectra
IT Ultraviolet and visible spectra
(of azomethines and hydrazones)
IT Substituent effect
(on electronic spectra of azomethines and hydrazones)
IT Hydrogen bond
(intramol., in hydrazones, electronic spectra in relation to)
IT 1333-74-0
RL: PRP (Properties)
(hydrogen bond, intramol., in hydrazones, electronic spectra in relation to)
IT 4722-47-8P 4754-98-7P 27845-13-2P 85415-01-6P 97497-45-5P
100796-50-7P 107266-41-1P 124009-34-3P 124009-35-4P
124009-36-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and electronic spectrum of)
IT 93-91-4, Benzoyl acetone 109-77-3, Malononitrile 120-46-7,
Dibenzoylmethane 123-54-6, Acetylacetone, reactions 614-16-4,
2-Cyanoacetophenone
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (diethylamino)benzenediazonium tetrafluoroborate and diethylnitrosoaniline)
IT 120-22-9, N,N-Diethyl-p-nitrosoaniline 347-46-6, 4-(Diethylamino)benzenediazonium tetrafluoroborate
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with active methylene compds.)
L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1975:461604 CAPLUS <<LOGINID::20061024>>
DN 83:61604
ED Entered STN: 12 May 1984
TI Determination of triplet-energy levels in azomethine dyes by energy-transfer measurements
AU Herkstroeter, W. G.
CS Res. Lab., Eastman Kodak Co., Rochester, NY, USA
SO Journal of the American Chemical Society (1975), 97(11), 3090-6
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
CC 40-4 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)
Section cross-reference(s): 22
AB Flash kinetic spectrophotometry was used to measure rate consts. for energy transfer from a graded series of triplet sensitizers to azomethine dyes; triplet-energy levels in the dyes were assigned near that point where the efficiency of energy transfer began to decrease. Yellow azomethines prepared by oxidative coupling of phenylenediamines with tert-BuCOCH2CONHPh, PhCOCH2CONHPh, (PhCO)2CH2, (MeCO)2CH2, and (tert-BuCO)2CH2 had triplet energies of 40-50 kcal/mole. Cyan and magenta dyes, prepared by oxidative coupling of phenylenediamines with phenols or 2-pyrazolin-5-ones, quenched the lowest-energy triplet sensitizers at the maximum rate and were assigned triplet energies of ≤ 21 and ≤ 23 kcal/mole, resp. The low triplet energy of the cyan and magenta dyes indicates that electronic energy transfer contributes to the mechanism by which these dyes quench singlet oxygen [7782-44-7].
ST azomethine dye triplet energy

```

IT   Dyes
      (azomethine, triplet-energy levels in, determination of)
IT   Energy level transition
      (electronic, in azomethine dyes)
IT   Fluorescence quenching
      (of singlet oxygen by azomethine dyes, mechanism of)
IT   Energy level
      (triplet, of azomethine dyes, determination of)
IT   Energy transfer
      (triplet-triplet, from hydrocarbon sensitizers to azomethine dyes)
IT   7782-44-7, properties
      RL: PRP (Properties)
      (quenching of singlet, by azomethine dyes, mechanism of)
IT   55901-13-8  55901-14-9  55901-15-0
      RL: USES (Uses)
      (triplet energy and lifetime of)
IT   55901-04-7
      RL: PRP (Properties)
      (triplet energy level in, determination of)
IT   1456-89-9  2363-97-5  4595-01-1  4704-33-0  4704-35-2  4719-41-9
      4719-49-7  4754-76-1  4754-82-9  4754-92-1  4754-96-5  4754-98-7
      4755-00-4  13617-66-8  13617-67-9  34980-06-8  50818-01-4  50818-02-5
      50818-06-9  55779-72-1  55779-74-3  55779-78-7  55901-05-8
      55901-06-9  55901-07-0  55901-08-1  55901-09-2  55901-10-5
      55901-11-6  55901-12-7
      RL: PRP (Properties)
      (triplet-energy level in, determination of)

```

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	15.81	182.96
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.75	-3.75

STN INTERNATIONAL LOGOFF AT 08:51:24 ON 24 OCT 2006

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptalxnl621

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 AUG 09 INSPEC enhanced with 1898-1968 archive
NEWS 4 AUG 28 ADISCTI Reloaded and Enhanced
NEWS 5 AUG 30 CA(SM)/CAplus(SM) Austrian patent law changes
NEWS 6 SEP 11 CA/CAplus enhanced with more pre-1907 records
NEWS 7 SEP 21 CA/CAplus fields enhanced with simultaneous left and right
truncation
NEWS 8 SEP 25 CA(SM)/CAplus(SM) display of CA Lexicon enhanced
NEWS 9 SEP 25 CAS REGISTRY(SM) no longer includes Concord 3D coordinates
NEWS 10 SEP 25 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
NEWS 11 SEP 28 CEABA-VTB classification code fields reloaded with new
classification scheme
NEWS 12 OCT 19 LOGOFF HOLD duration extended to 120 minutes
NEWS 13 OCT 19 E-mail format enhanced
NEWS 14 OCT 23 Option to turn off MARPAT highlighting enhancements available
NEWS 15 OCT 23 CAS Registry Number crossover limit increased to 300,000 in
multiple databases
NEWS 16 OCT 23 The Derwent World Patents Index suite of databases on STN
has been enhanced and reloaded

NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8
NEWS X25 X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that
specific topic.

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result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:53:06 ON 24 OCT 2006

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:53:18 ON 24 OCT 2006
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 23 OCT 2006 HIGHEST RN 911100-17-9
DICTIONARY FILE UPDATES: 23 OCT 2006 HIGHEST RN 911100-17-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

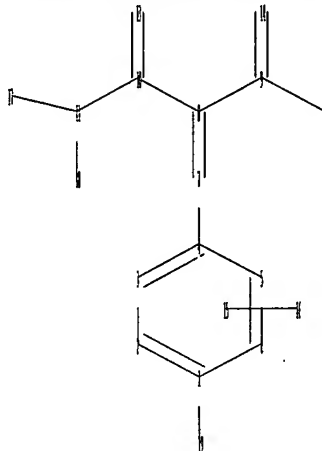
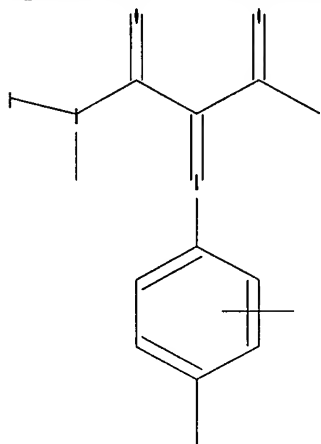
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\microsphere33.str



chain nodes :
7 8 9 10 11 12 13 14 15 16 17 18 19
ring nodes :
1 2 3 4 5 6
chain bonds :
1-19 4-7 7-8 8-9 8-10 9-12 9-14 10-11 10-13 11-17 11-18 15-16
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
4-7 7-8 9-14 10-11 10-13 11-18
exact bonds :
1-19 8-9 8-10 9-12 11-17 15-16
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

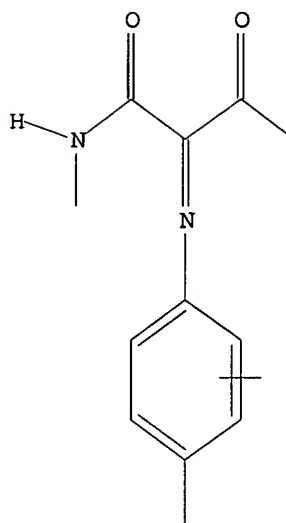
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L1 full

FULL SEARCH INITIATED 08:53:40 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 375 TO ITERATE

100.0% PROCESSED 375 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1